UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/938,031 | 08/23/2001 | Shawfu Chen | POU920000198US1 | 1675 |

46369 7590 12/13/2005

HESLIN ROTHENBERG FARLEY & MESITI P.C.
5 COLUMBIA CIRCLE
ALBANY, NY 12203

| EXAMINER | |
|---|---|
| TON, DANG T | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2666 | |

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/938,031 | CHEN ET AL. | |
| | Examiner | Art Unit | |
| | DANG T. TON | 2666 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *07 November 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *7-11,25-29 and 44-48* is/are allowed.

6)☒ Claim(s) *1-3,5,6,18-21,23,24,36-40,42,43, and 55* is/are rejected.

7)☒ Claim(s) *4,12-17,22,30-35,41 and 49-54* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 37 is rejected under 35 U.S.C. 102(e) as being anticipated by Muller et al. (6,606,301).

For claim 37, Muller et al. disclose method and apparatus for early random discard of packets comprising:

determining whether a memory resident queue being serviced desired level( see column 3 lines 45-51); and

removing one or more messages from the memory resident queue in response to a determination that the memory resident queue is not being serviced at desired level (see abstract lines

7-8 wherein it teaches packet already in the queue being dropped) ;

wherein the removing of the more messages causes one or more resources associated with the memory resident queue to be freed (see column 3 lines 58-59); and

wherein the desired level takes into consideration a full level of the memory resident queue (see column 3 lines 46-47).

NOTE: the term "adapted to " is not positive limitation. Therefor, the limitation after the term is not considered the claimed limitation. It is suggested applicant to remove the term.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35

U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1,2,3,5,6,21,23,24,38,39,40,42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mullet et al. in view of Yamada (5,455,820).

For claims 1,2,6,20,24,38,39, and 43 , Muller et al. disclose all the subject matter of the claimed invention with the exception of storing the removed message in a communications network. Yamada (5,455,820) from the same or similar fields of endeavor teaches a provision of the storing the message to the spare buffer when overflow (see box s15 in figure 4a). Thus, it

would have been obvious to the person of ordinary skill in the art at the time of the invention to use storing the removed message as taught by Yamada (5,455,820)in the communications network of Muller et al.

The storing the removed message can be implemented/modified into the network of Muller et al. by having another memory to store the removed message when it detects the fullness of the memory. The motivation for using storing the removed message taught by Yamada (5,455,820) into the communications network of Muller et al. being that it prevents congestion due to fullness of the memory resident queue and retrieve the removed message when the buffer is not full.

For claims 3,5,21,,23,40,and 42 , Muller et al. and Yamada disclose all the subject matter of the claimed invention with the exception of returning at least one of the removed message to the queue and the at least one of the message comprising a set of messages associated with a selected swept identifier in a communications network. However, returning at least one of the removed message to the queue and the at least one of the message comprising a set of messages associated with a selected swept identifier is well-known in the art . Thus, it would have been obvious to the person of ordinary skill in the

art at the time of the invention to use returning at least one of the removed message to the queue and the at least one of the message comprising a set of messages associated with a selected swept identifier in the communications network of Muller et al.

Returning at least one of the removed message to the queue and the at least one of the message comprising a set of messages associated with a selected swept identifier can be implemented/modified into the network of Muller et al. since it does teach removing the message from the queue; therefor it can return the message back to the queue or it can select which message to delete from the queue. The motivation for using returning at least one of the removed message to the queue and the at least one of the message comprising a set of messages associated with a selected swept identifier into the communications network of Muller et al. and Yamada being that it saves bandwidth of the queue and reduces the overflow of the capacity of the queue.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the

differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 18,36,and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller et al. in view of Yamada and further in view of Dievendorff ( 5,465,328).

For claims 18,36,and 55, Muller et al. and Yamada disclose all the subject matter of the claimed invention with the exception of determining step being performed at one or more time intervals in a communications network. Dievendorff from the same or similar fields of endeavor teaches a provision of the checkpoint being performed by the manager at one or more time intervals (see column 10 lines 45-52 and column 3 line 54 to column 4 line 6). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use determining step being performed at one or more time intervals as taught by Dievendrorff in the communications network of Muller et al. and Yamada .

The determining step being performed at one or more time intervals can be implemented/modified into the network of Muller et al. and Yamada since it does teach detecting the

fullness of the memory. The motivation for using determining step being performed at one or more time intervals as taught by Dievendorff. into the communications network of Muller et al. being that it prevents congestion due to fullness of the memory resident queue.

5. Claims 4,12-17,22,30-35,41 and 49-54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 7-11,25-29, and 44-48 are allowed.

7. Applicant's arguments with respect to claims 1-55 have been considered but are moot in view of the new ground(s) of rejection.

In the remarks of Nov 07 2005, applicant traverses the rejection under 35 U.S.C. 102 and 103. The traversal is based on ground that reference does not teach removing one of messages to storage. This argument is not found to be persuasive. Applicant's attention is directed at figure 4a of Yamada wherein it teaches the spare buffer to store the message.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANG T TON whose telephone number is 571-272-3171. The examiner can normally be reached on MON-WED, 5:30 AM-6:00 PM and Thur 5:30-9:30 A.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Ton